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Socio-demographic factors and pattern of stressor in patients with conversion disorder

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Abstract: Background: Conversion disorder is a prevalent psychiatric illness characterized by various clinical patterns, including visual paralysis, dystonia, psychogenic non-epileptic seizures, anesthesia-like symptoms, swallowing problems, motor tics, and difficulty walking. These symptoms vary greatly from case to case and can vary in the same patient during successive episodes. Most symptoms are related to life stressors.
Study design: A cross-sectional study was conducted to estimate the sociodemographic profile, types of stressors, and variety of clinical symptoms presented in patients with conversion disorder in a tertiary care center in the North-East region of India. A total of 74 patients diagnosed according to Diagnostic and Statistical Manual of Mental Disorders Fifth Edition criteria were included. Patients underwent assessments of comorbidity using the Hamilton Depression Rating Scale, Hamilton Anxiety Scale, and assessments of stressful life events using the Presumptive Stressful Life Event Scale.
Result: The most common lifetime stressor was excessive alcohol use by family members with financial loss or problems (43.7%). Immediate stressors prior to the onset of illness were broken engagement or love affair (25.7%), family conflict (24.3%), marital conflict (14.9%), examination-related problems (10.8%), and other problems (23%). Motor symptoms were the most common type of clinical presentation (58.4%), with pseudo-seizures being the most common (29.7%). Other motor symptoms included paresis of the lower limb (9%), paresis of the left-side upper and lower limb (2.7%), aphonia/dysphonia (12.2%), limb paralysis (1.4%), dysphasia (2%), and ataxia (1.4%). Conversion disorder with mixed motor and sensory deficit (multiple fainting spells) was found to be the most common symptom (37.8%) in this region.

Keywords: Conversion disorder; Stress; Anxiety; Depression.

1. Introduction

Conversion disorder is a psychiatric illness that has been recognized for over a century. Sigmund Freud first introduced the term, and he theorized that symptoms of conversion disorder reflect unconscious conflict. In India, the occurrence of conversion disorder is particularly high in young adults from poor socio-economic backgrounds, joint families, and is significantly more common in females [1]. It is likely that cultural factors play a significant role in this prevalence.

The role of stressors in the development of conversion disorder has been emphasized [2]. Poverty, poor infrastructure, and high prevalence of substance abuse can lead to various types of stressors in families, creating the ideal conditions for the generation of conversion disorder. Although literature on conversion disorder is available, the socio-cultural background, women's empowerment, poor condition of adult males, and extreme poverty may present different significant stressors. Therefore, the present study aims to estimate socio-demographic factors and the pattern of stressors in patients with conversion disorder in a tertiary care center in the North-East region of India.

Understanding the socio-demographic profile and stressors associated with conversion disorder can help clinicians and researchers develop effective interventions and preventive measures. The results of this study

could contribute to the development of culturally sensitive and context-specific approaches to the management of conversion disorder in India.

2. Study Design and Methods

A cross-sectional study was conducted in the Department of Psychiatry, Regional Institute of Medical Sciences (RIMS), Imphal, from September 2016 to September 2017. Informed consent was obtained from 74 patients who fulfilled the diagnostic criteria of conversion disorder according to the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5)[3]. Patients with a known history of organic disorder, epilepsy, and severe psychiatric illness such as psychosis spectrum were excluded. Socio-demographic details, including age, sex, education, occupation, marital status, family type, socio-economic status, and precipitating factors for developing conversion disorder, were recorded. The Hamilton Depression Rating Scale (HAM-D), Hamilton Anxiety scale (HAM-A), and Presumptive Stressful Life Event Scale (PSLES)[4,5] scores were also recorded. The PSLES consists of 51 items and measures stress due to life events. The scale has been standardized for two time spaces - lifetime and past 1 year, and it consists of life events relevant to the Indian setting, arranged in decreasing order of perceived stress.

3. Results

Out of the 74 patients, 50% belonged to the age group of 18-29 years, followed by the age group of 6-17 years with a percentage of 31.1%. Conversion disorder was more common in female patients, accounting for 83% of the cases. The majority of cases were Hindu (67.6%), while Muslim and Christian were found to be 10.8% and 21.6%, respectively. Among the patients, 58% were unmarried, while married cases and divorced cases accounted for 37.8% and 4.1%, respectively. Occupational wise, 49.7% of patients were students, while housewives accounted for the second most common category (35.1%). The majority of patients belonged to the nuclear family (74.3%), and 75.7% of cases belonged to rural regions, while 24.3% cases belonged to urban areas.

Regarding the severity of illness, this study showed that 62.2% of patients scored mild on the HAM-D scale, while 23% cases scored a normal interpretation. On the HAM-A scale, 55.4% of patients had mild illness, followed by moderate (39.2%) and severe (4%).

In terms of the most common lifetime stressors, this study found that excessive alcohol use by family members with financial loss or problems was the most common stressor (43.7%), followed by isolated alcohol use by male family members (29.7%). Some cases (10.8%) denied experiencing any lifetime stressors.

The study evaluated immediate stressors (precipitating factors) prior to the onset of illness and found that 25.7% of the subjects faced broken engagement or love affairs, 24.3% faced family conflict, 14.9% faced marital conflict, 10.8% had examination-related problems, and the remaining 23% had other problems. Only 2.7% of cases denied immediate stressors. The birth of a daughter was the least documented stressor (1.4%) in this region. Motor symptoms were the most common type of clinical presentation (58.4%). Amongst the motor symptoms, pseudoseizure was the most common presentation (29.7%). Other motor symptoms included paresis of the lower limb (9%), paresis of the left-side upper and lower limb (2.7%), aphonia/dysphonia (12.2%), limb paralysis (1.4%), dysphasia (2%), and ataxia (1.4%). Conversion disorder with mixed motor and sensory deficit (multiple fainting spells) was found to be the most common symptom (37.8%) present in this region. No subjects presented with isolated sensory symptoms. Shortness of breath was present in almost all cases.

Tables 1-3 are supplementary data of this current study which is there to be published. This study is an original article and the tables are the result of the study findings. This manuscript is made from a dissertation and the data is going to be published which has been found in this study. Tables are the part of this study which is not being published yet.

Table 1. Distribution of respondents according to life time stressor

Life Time Stressor	Cases	Percentage(%)
Family conflict	3	4.1
Extra marital relation of spouse	2	2.7
Financial loss or problems	3	4.1
Death of close family member	3	4.1
"Excessive use of alcohol by family member"	22	29.7
"Excessive use of alcohol by family member with financial loss or problems"	32	43.2
"Death of close family member with financial loss or problem with family conflict"	1	1.4
Nil	8	10.8

Table 2. Distribution of respondents according to immediate stressors

Immediate Stressors	Cases	Percentage %
Broken engagement or love affair	19	25.7
Family conflict	18	24.3
Change in working conditions or Transfer	1	1.4
Extramarital relationship	3	4.1
Appearing for an examination or Interview	8	10.8
Marital conflict	11	14.9
Financial loss or problems	1	1.4
Failure in examination	2	2.7
Conflict with in-laws (other than over dowry)	2	2.7
Death of close family member	1	1.4
Nil	2	2.7
Son or daughter leaving home	1	1.4
Marital Divorce	2	2.7
Death of spouse	1	1.4
Birth of daughter	1	1.4
Self or family member unemployed	1	1.4

Table 3. Distribution of respondents according to Symptoms

Symptoms/Sign	Cases	Percentage
Fainting spells followed by Pseudocoma	28	37.8
Pseudoseizure	22	29.7
Aphonia	9	12.2
Paraparesisoflowerlimb	9	12.2
Weakness of left side upper and lower limb	2	2.7
Dysphagia	2	2.7
Ataxia	1	1.4
Paraplegia	1	1.4

4. Discussion

In this study, a total of 74 patients who satisfied the DSM-5 diagnostic criteria of conversion disorder were evaluated. Socio-demographic data were recorded in detail to assess the socio-demographic pattern in the study. The severity of the illness was assessed for all patients using HAM-A and HAM-D scales, respectively. Later, stressful life events were assessed using the PSLES scale. The study was discussed based on the aims and objectives of the research and in the light of previous research conducted in this area. Some aspects of the data and results relevant to the local culture were also highlighted.

The lifetime, most important stressors were similar in both sexes, and it was related to excessive alcohol use by family members with financial problems. This finding is consistent with Anuradha *et al.,* [6], who reported that the most important stressor was financial problems. According to this study, the most common immediate stressor was a broken engagement or love affair (25.7%), followed by family conflict (24.3%),

marital conflict (14.9%), and 10.8% had examination-related problems, and the remaining 23% had other problems. 2.7% of cases had denied immediate stressors. Birth of a daughter was the least documented stressor and was present in only one case (1.4%). Anuradha *et al.,* [6] reported that "immediate (within one year) stressors differed in both sexes; it was concerning education in males and related to a broken engagement or relationship problem in females." Kuloglu *et al.*,[7] concluded that "the psychosocial stress factors were found in the initiation or at the last episode of the disorder (88.9%). The most prominent problem related to the primary support group was traumatic events (37.9%), followed by problems associated with migration and related economical problems." Roy S *et al.*,[8] reported "a different order of stressor frequency in which the most common stressor was disturbed relation with in-laws (20.8%), followed by failure in examination or study problem (20%), disturbed relation with spouse (15.4%), husband staying abroad (13.3%), love problems (11.2%), job stress or more workload (11.2%), relationship problem with family members or parents (9.6%), financial crisis (1.2%)."

The majority of patients (58.5%) first presented with motor symptoms. Pseudo seizure was the most often occurring motor symptom (29.7%). Paresis of the lower limb occurred in 9% of cases, left-sided upper and lower limb paresis in 2.7%, aphonia/dysphonia in 12.2%, limb paralysis in 1.4%, dysphasia in 2%, and ataxia in 1.4%. The most prevalent symptom overall (37.2%) was conversion disorder with mixed motor and sensory deficiency (many episodes of fainting). In no cases did individuals report just sensory complaints. All or almost all instances included difficulties breathing. This finding is consistent with findings reported by Goswami HK *et al.,* [9] in a "Phenomenological study of 'hysterical neurosis' in Lower Assam, which showed that mono-symptomatic hysteria was rare. The most common symptom was 'fits' (episodic loss of consciousness only) to be followed by convulsive movement of the entire body." Kuloglu *et al.*,[8] concluded that the "most common subtype of CD was nonepileptic seizure (NES) (41.4 %)." Bhatia MS *et al.*,[10] studied "about hysterical aphonia and concluded that, Out of 796 cases of conversion disorder seen during the study period, 25 (3.2%) were having aphonia."

5. Conclusion

Early life stressors and frequent exposure to different kinds of daily life stressors can lead to various psychiatric illnesses, such as Conversion Disorder. While the potential causes of Conversion Disorder are still being debated, this study has shown the role of psychological and psychosocial factors in the development of this disorder. It is worth noting that very few studies have been conducted so far to explore the finer aspects of the phenomenology of hysteria [11,12]. Therefore, conducting a study in the general population of the community could be more contributory towards the exploration of the phenomenology of Conversion Disorder in Manipur.

6. Limitations

The sample size of this study was only 74, and it was a pure hospital-based study with no sample from the community or control group for comparison. Additionally, there has been no validation of the converted presumptive stressful lifetime scale into the local language.

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Conflicts of Interest: "Nil."

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